



Pioneers and Soldiers Cemetery

Pollinator Enhancement





GREAT RIVER GREENING

RESTORING LAND, WATER AND WONDER

Great River Greening inspires, engages and leads local communities in conserving and caring for the land and water that enrich our lives.

What we do:

- Partner with landowners to restore urban and rural landscapes across MN
- Engage local communities through volunteer opportunities and education
- Deliver in-house restoration services through our Greening Solutions program
- Develop and promote innovative solutions for sustainable management

Site Background and Goals for Enhancement

- Oldest existing cemetery in Minneapolis, dating to 1853
- Resting place for prominent territorial pioneers, early African American residents, abolitionists, and immigrants from many nationalities.
- On the National Register of Historic Places since 2002.
- 21 acre green space in the heart of a diverse population with limited access to natural areas.
- Requires consistent vegetation maintenance with little habitat or aesthetic benefit.

Proposed Project Overview

- Focus on 10 acres (roughly half) of cemetery near on the north section
- Divide 10 acre project area into 4-6 plots (TBD) with the following treatments:
 - Non-native, low diversity “beelawn” seed enhancement, reduced but mechanically mowing
 - Non-native Bee Lawn utilizing grazing for maintenance
 - Native Bee Lawn seed enhancement, mechanically mowed
 - Native Bee Lawn, Grazed
 - Shortgrass prairie/native pollinator seed mix, mowed.
 - Shortgrass prairie/native pollinator with grazing
 - Remaining 11 acres would be a “control” plot, continuing existing maintenance regime.
 - All scope details pending coordination with the City.

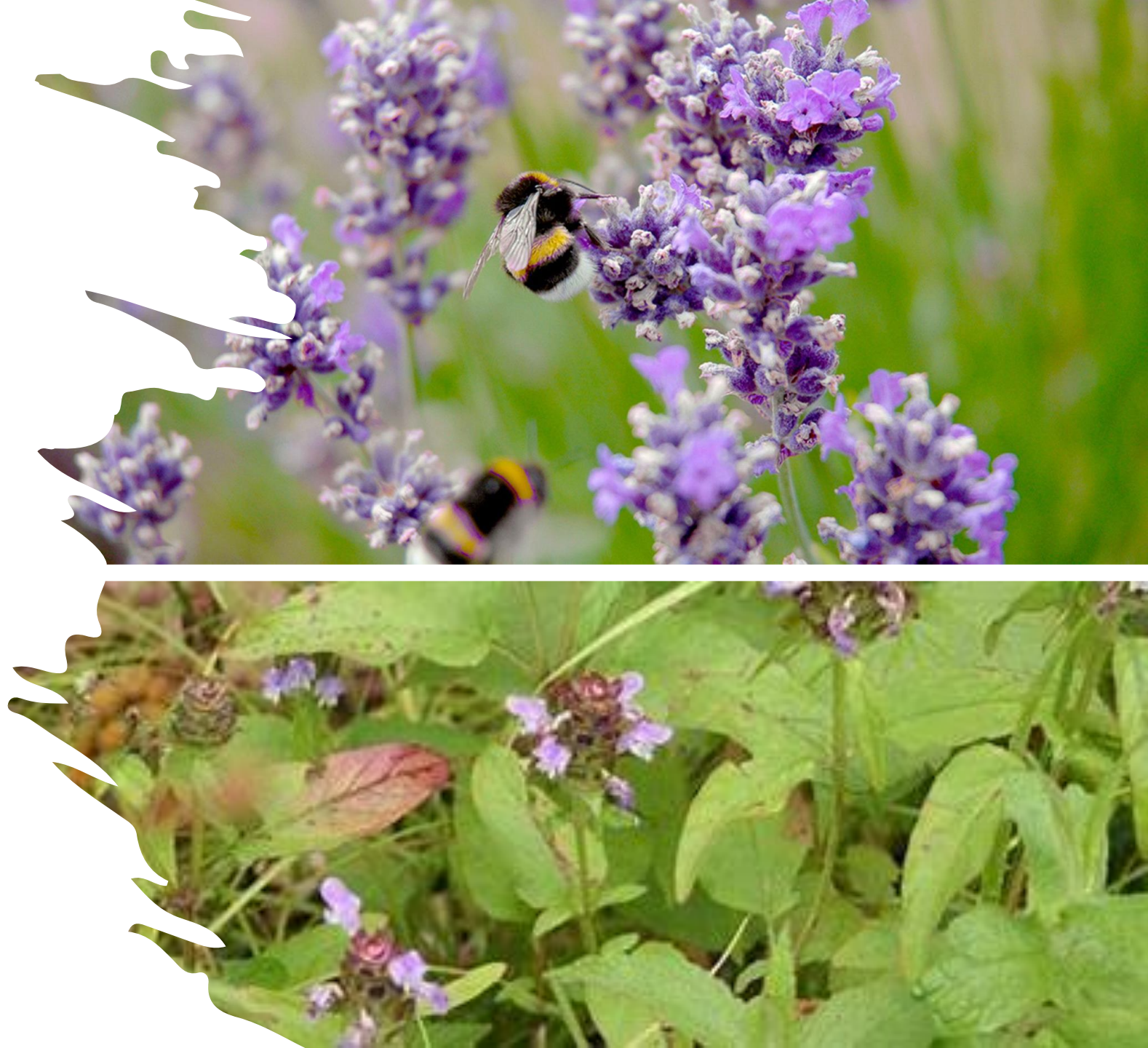
Non-native Bee Lawn

- Inexpensive
- Similar maintenance to existing turf
- Can be used the same as traditional turf lawn
- Provides cost-effective support to pollinators where more diverse plantings are not an option
- Fixes nitrogen, reduces needs for inputs
- Lower mowing frequency, reducing carbon from mowing



All Native Species Bee Lawn

- More expensive seed
- Serves a wider variety of pollinators, including native insects that evolved with specific flowers
- Similar use-case to traditional lawn
- Middle ground between non-native beelawn and high-diversity prairie



Native Prairie Installation

- Highest benefit to pollinators and native wildlife
- High carbon sequestration values
- Does not require regular mowings once established
- Attractive natural feature in an urban context
- Opportunities for seed harvest and use on other sites/expansion
- Higher cost of seed, installation, and need to control weeds during establishment
- Prescribed fire is ideal long-term management tool, but grazing and timed mowings or haying can mimic the results of fire effectively.



Grazing

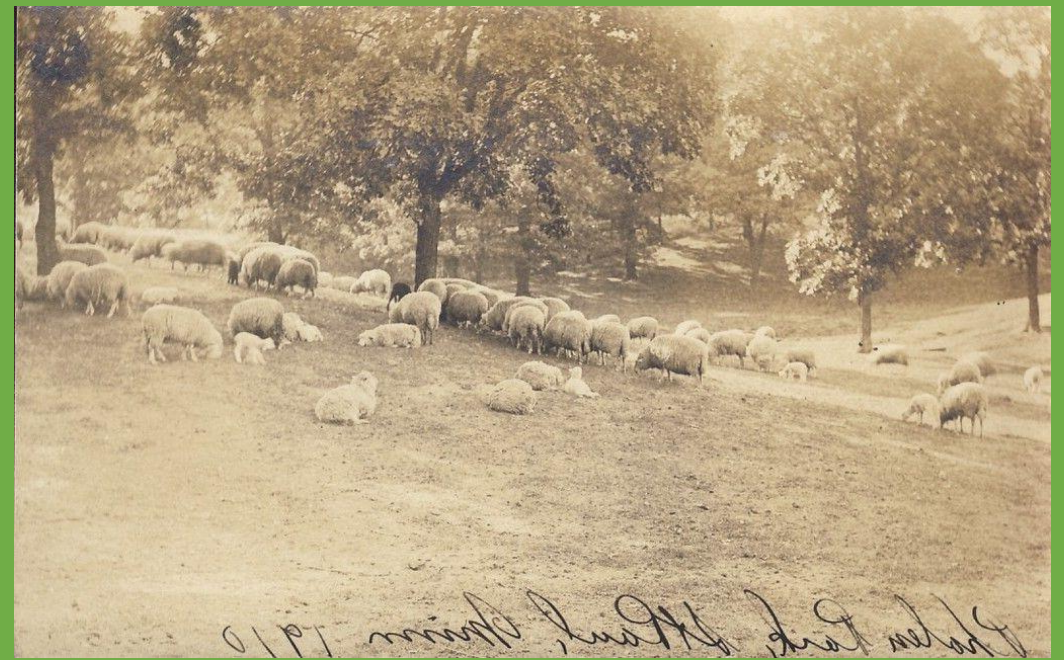
- Historical precedent for maintaining short vegetation
- Sustainable, closed loop system
- Cycles nutrients back into the system
- Engaging component for project visibility/community interest
- Sheep are ideal species for short cropping



*Sheep Grazing in Glenwood Park (Now Theodore Wirth Park)
1921*

Grazing Plan

- Proposing grazing as a pilot phase to observe how establishment of pollinator enhanced vegetation responds to grazing vs. mowing
- Each veg plot would be divided into mowing and grazing unit
- Electronet fencing would be employed with an additional secondary (non-electrified) fence to deter public access
- This would be released for public bid to contractors
- Likely multiple grazings during growing season (3-4 rounds)
- Opportunities for community engagement, youth outings, etc.





Community
Engagement

Stated Interest and support:

- Joe Beaulieu Executive Director, Little Earth Resident Association
- Fortune Weli, Executive Director, Isuroon (Somili/East African Women's Org)
- South High School All Nations Program (as part of our work with them in our Future Stewards Program)



Ideas for Community Involvement

- Public and private volunteer events to prep and seed the site
- Planting event for installation of native prairie species plot
- “Meet the sheep!” event
- Pollinator Monitoring workshops in year 2 and 3

Funding and Budget

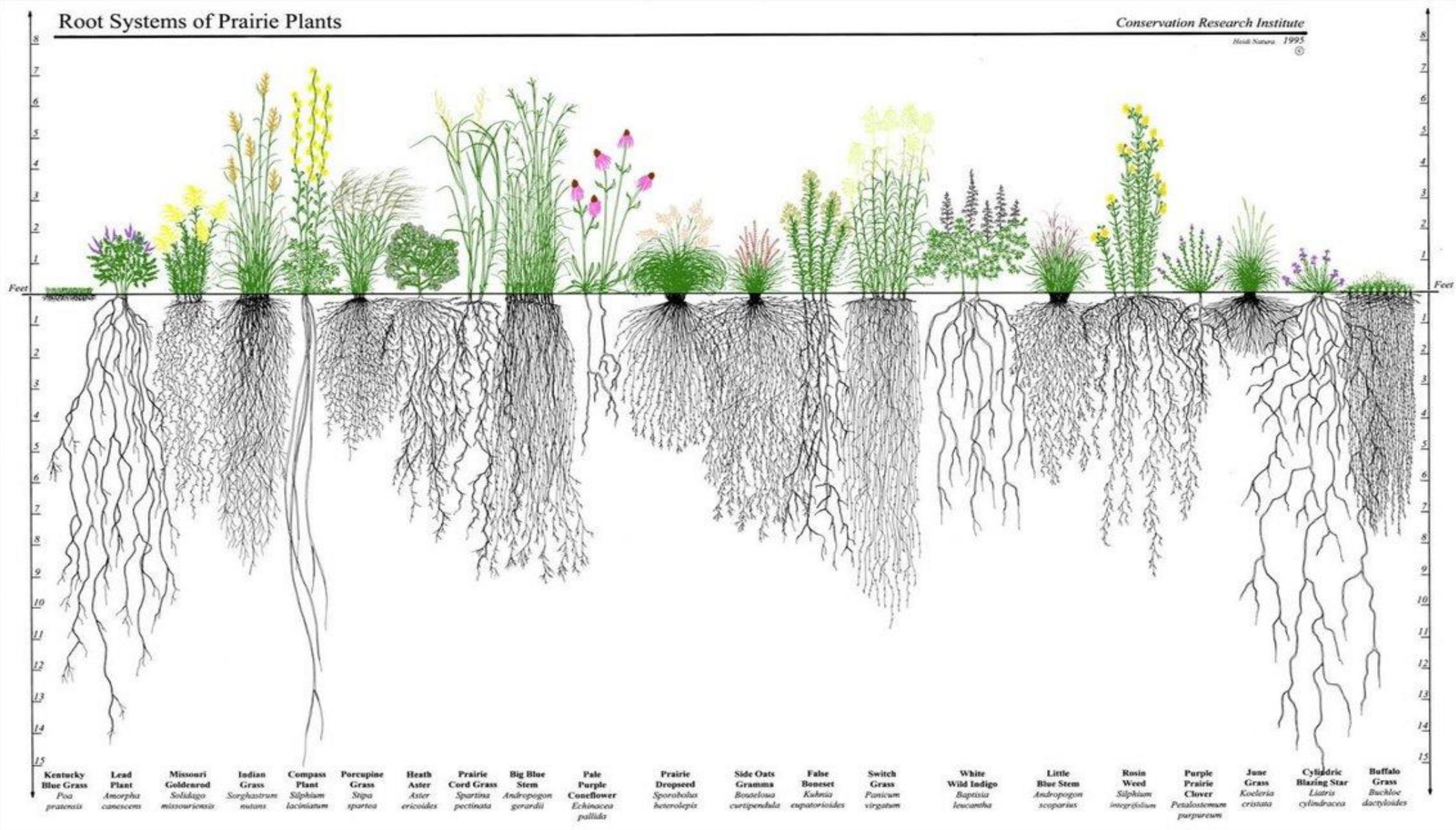
- Great River Greening is pursuing ENRTF funding on behalf of Mpls. We would manage the project during the funding period
- Inclusion in our “Pollinator Central 3” Grant Package proposal to LCCMR
- Projects with a strong Diversity, Equity and Inclusion (DEI) component make them stronger contenders for funding
- Draft budget for project is \$35,000, with a \$5K cash match ask from the City in addition to in-kind match (mowing primarily) from the City
- Proposals due to LCCMR May 26.
- 3 Year grant cycle, with City taking over maintenance in 2027.



Climate and Habitat Impacts



- Establish Prairie can sequester up to 18 tons of acre and is cumulative over time
- Turf grass only sequesters 1.5 tons per acre and is not cumulative due to carbon emissions from mowing and decomposition of clippings



Extensive root systems of native vegetation improve water quality and store carbon!



Questions?
